

WHAT IS CLAIMED IS:

1. An optical pick-up actuator comprising:

a lens holder mounted with an object lens and attached with tracking and focusing coils, the lens holder being maintained in a suspended state;

magnets adapted to generate a magnetic field interlinked with magnetic fields generated respectively by flows of current through the tracking and focusing coils, thereby allowing the object lens to be driven in focusing and tracking directions; and

a tilt-compensating magnetic circuit which is located in a tracking direction interposing the lens holder therebetween and is adapted to generate a magnetic field interlinked with the magnetic field generated by the current flowing through the focusing coil, thereby automatically compensating a tilt depending on the current flowing through the focusing coil.

2. The optical pick-up actuator according to claim 1, wherein the tilt-compensating magnetic circuit comprises tilt-compensating magnets.

3. The optical pick-up actuator according to claim 1, wherein the tilt-compensating magnetic circuit is configured to shift the center point of a focusing force toward an outer

periphery of a disk, thereby conducting the focusing and tilting operations simultaneously.

4. The optical pick-up actuator according to claim 3,  
5 wherein the focusing and tracking magnets and the tracking coil are configured to be movable toward the outer periphery of the disk, thereby shifting the center point of the focusing force toward the outer periphery of the disk.

10 5. The optical pick-up actuator according to claim 1, wherein the tilt-compensating magnetic circuit comprises tilt-compensating electromagnets.

15 6. The optical pick-up actuator according to claim 1, wherein the tilt-compensating magnetic circuit is conducted to make a minus (-) tilting angle in its focusing-up operation and a plus (+) tilting angle in its focusing-down operation.

20 7. The optical pick-up actuator according to claim 1, wherein the tilt-compensating magnetic circuit compensates the amount of tilt which is proportional to the current flowing through the focusing coil.

8. The optical pick-up actuator according to claim 1, wherein the tilt compensated by the tilt-compensating magnetic circuit is a radial tilt.